



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,725	03/22/2004	Ronald Craig Woodley	2003P11608 US01	9240

7590 03/29/2007
Alexander J. Burke
Intellectual Property Department
5th Floor
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

LE, DEBBIE M

ART UNIT	PAPER NUMBER
----------	--------------

2168

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/805,725	WOODLEY, RONALD CRAIG	
	Examiner	Art Unit	
	DEBBIE M. LE	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/22/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "said predetermined computation formula" in 2.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 11-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims are useful and concrete, but they fail to produce a tangible result nor any a real-world result reported. To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 non-statutory above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four categories of invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richburg (US Patent 5,159,687) in view of Peyton-Jones et al (US Patent Application Publication No. 2004/0103366 A1).

As per claim 1, Richburg discloses [a] system for generating an executable procedure, comprising:

a repository (Fig. 2, # 14, col. 9, lines 42-43, as knowledgebase 14 is seen to be a repository of specific computer programming knowledge) including representative data of an executable procedure (abstract, col. 7, lines 17-23, as knowledgebase includes lines of actual program scripts adapted to a generic problem to be solved, software engineer language (SEL) statement and instructions for composing the script unit into output script);

an executable application for processing data to provide an executable procedure for use in processing data (Fig. 2, # 13, abstract, col. 5, lines 52-62, as application database 13 in conjunction with knowledgebase 14, wherein the application database 13 is to specify particular requirements for the process to be programmed within the generic set stored in the knowledgebase); and

a command processor for initiating execution of said executable procedure in response to user command (Fig. 2, # 15, col. 5, lines 52-62, as program processor 15 responds to the application database and the knowledgebase to produce output file coordinated to the particular task specific application as specified by a user).

Richburg does not explicitly teach spreadsheet including stored data elements determining characteristics, characteristics determined by said data elements and for use in processing data using said data elements. However, Peyton-Jones teaches spreadsheet including stored data elements determining characteristics, characteristics determined by said data elements and for use in processing data using said data elements (para. 0022, para. 0023-0028, as spreadsheet application includes the function sheet 104, wherein the function sheet defines formal input parameters, operations in the body of the function, and a result). Thus, it would have been obvious to one of ordinary skill on the art at the time invention was made to combine the teachings of the cited references to implement a spreadsheet including stored data elements determining characteristics, characteristics determined by said data elements and for use in processing data using said data elements as disclosed by Peyton-Jones because it would allow users of Richburg's system to create new named functions that are defined using the spreadsheet and its formula because these functions are build-in with provide users with more flexibility, such as customization, reusability, etc. as suggest by Peyton-Jones (para. 0019, lines 6-10).

As per claim 2, Richburg further teaches wherein said executable procedure processes data in a database using said data elements to provide updated data for storage in said database (col. 6, lines 34-47).

As per claim 3, Richburg further teaches wherein said executable procedure characteristics determined by said data elements comprise at least one of, (a) programming language structural features, (b) structure of sub-procedures in said executable procedure and (c) a process performed by a sub-procedure in said executable procedure (col. 7, lines 54-67).

As per claim 4, Richburg further teaches wherein said executable application processes said spreadsheet representative data to provide an executable procedure for updating a data item in a database using one of said data elements to replace a prior corresponding data element of a predetermined computation (col. 12, lines 45-67). Richburg does not explicitly teach computation formula. But, Peyton-Jones teaches computation formula (para. 0040, as formula is $=(A1+6/B3)$). Thus, it would have been obvious to one of ordinary skill on the art at the time invention was made to combine the teachings of the cited references to include the step computation formula as disclosed by Peyton-Jones because it would allow users of Richburg's system to create new named functions that are defined using the spreadsheet formula because these functions are build-in with provide users with more flexibility, such as customization, reusability, etc. as suggest by Peyton-Jones (para. 0019, lines 6-10).

As per claim 5, Richburg does not explicitly teach wherein said prior corresponding data element of said predetermined computation formula comprises at least one of, (a) a factor used as a multiplier in said computation formula, (b) a constant in said computation formula, (c) a threshold value identifying whether said computation formula applies, (d) a threshold value identifying whether a portion of said computation formula applies. However, Peyton-Jones teaches wherein said prior corresponding data element of said predetermined computation formula comprises at least one of, (a) a factor used as a multiplier in said computation formula, (b) a constant in said computation formula, (c) a threshold value identifying whether said computation formula applies, (d) a threshold value identifying whether a portion of said computation formula applies (para. 0021). Thus, it would have been obvious to one of ordinary skill on the art at the time invention was made to combine the teachings of the cited references to include the step computation formula as disclosed by Peyton-Jones because it would allow users of Richburg's system to create new named functions that are defined using the spreadsheet formula because these functions are build-in with provide users with more flexibility, such as customization, reusability, etc. as suggest by Peyton-Jones (para. 0019, lines 6-10).

As per claim 6, Richburg teaches wherein said executable application processes said spreadsheet representative data to provide an executable procedure by updating a data item in said database by replacing said data item with one of said data elements (col. 11, lines 45-62).

As per claim 7, Richburg teaches wherein said executable application is a

Art Unit: 2168

Script for generating programming language code comprising code in at least one of, (a) C++, (b) Java, (c) HTML, (d) XML and (e) SGML (col. 20, lines 25-33, col. 25, lines 30-31).

As per claim 8, Richburg discloses [a] system for updating data items in a database, comprising:

a repository (Fig. 2, # 14, col. 9, lines 42-43, as knowledgebase 14 is seen to be a repository of specific computer programming knowledge) representative data (abstract, col. 7, lines 17-23, as knowledgebase includes lines of actual program scripts adapted to a generic problem to be solved, software engineer language (SEL) statement and instructions for composing the script unit into output script);

an executable application for processing representative data to provide an executable procedure (Fig. 2, # 13, abstract, col. 5, lines 52-62, as application database 13 in conjunction with knowledgebase 14, wherein the application database 13 is to specify particular requirements for the process to be programmed within the generic set stored in the knowledgebase) for updating a data item in a database to replace a prior corresponding predetermined computation to provide an updated computation and (col. 12, lines 45-67, col. 13, lines 11-25, as parameter substitution in SEL statements is to communicate knowledgebase file names, requirement database value, file name, etc. to substitute other process names or value, and a special knowledgebase coding instruct is used to specify a replacement name parameter);

a command processor for initiating execution of said executable procedure

Art Unit: 2168

in response to user command (Fig. 2, # 15, col. 5, lines 52-62, as program processor 15 responds to the application database and the knowledgebase to produce output file coordinated to the particular task specific application as specified by a user).

Richburg does not explicitly teach spreadsheets and computation formula. But, Peyton-Jones teaches spreadsheet and computation formula (para. 0021, para. 0040, as spreadsheet application and formula is $= (A1 + 6/B3)$). Thus, it would have been obvious to one of ordinary skill on the art at the time invention was made to combine the teachings of the cited references to include the step computation formula as disclosed by Peyton-Jones because it would allow users of Richburg's system to create new named functions that are defined using the spreadsheet formula because these functions are build-in with provide users with more flexibility, such as customization, reusability, etc. as suggest by Peyton-Jones (para. 0019, lines 6-10).

As per claim 9, Richburg further teaches wherein said execution of said executable procedure re-computes a value of said data item using said updated computation formula and updates said data item in said database with said re-computed value (col. 14, lines 5-34).

As per claim 10, Richburg discloses [a] system for generating an executable procedure, comprising:

a repository (Fig. 2, # 14, col. 9, lines 42-43, as knowledgebase 14 is seen to be a repository of specific computer programming knowledge) including representative data (abstract, col. 7, lines 17-23, as knowledgebase includes lines of actual program

Art Unit: 2168

scripts adapted to a generic problem to be solved, software engineer language (SEL) statement and instructions for composing the script unit into output script);

an executable application for processing representative data to provide an executable procedure (Fig. 2, # 13, abstract, col. 5, lines 52-62, as application database 13 in conjunction with knowledgebase 14, wherein the application database 13 is to specify particular requirements for the process to be programmed within the generic set stored in the knowledgebase) for updating a data item in a database to replace a prior corresponding a predetermined computation to provide an updated computation (col. 12, lines 45-67, col. 13, lines 11-25, as parameter substitution in SEL statements is to communicate knowledgebase file names, requirement database value, file name, etc. to substitute other process names or value, and a special knowledgebase coding instruct is used to specify a replacement name parameter) and

re-computing a value of said data item using said updated computation; and a storage processor for updating said data item in said database with said re-computed value (col. 14, lines 5-35, as first, SEL and code script statements stored in the knowledgebase 14 are read into this input, where they first processed by the statement modification unit 21, if the SEL or code script statement contain substitution parameters, they are replaced with values form the requirements database memory 20).

Richburg does not explicitly teach spreadsheet including stored data elements determining characteristics, characteristics determined by said data elements and for use in processing data using said data elements and computation formula. However,

Art Unit: 2168

Peyton-Jones teaches spreadsheet including stored data elements determining characteristics, characteristics determined by said data elements and for use in processing data using said data elements (para. 0022, para. 0023-0028, as spreadsheet application includes the function sheet 104, wherein the function sheet defines formal input parameters, operations in the body of the function, and a result) and computation formula (para. 0021, para. 0040, as spreadsheet application and formula is $= (A1 + 6/B3)$). Thus, it would have been obvious to one of ordinary skill on the art at the time invention was made to combine the teachings of the cited references to implement a spreadsheet including stored data elements determining characteristics, characteristics determined by said data elements and for use in processing data using said data elements and computation formula as disclosed by Peyton-Jones because it would allow users of Richburg's system to create new named functions that are defined using the spreadsheet and its formula because these functions are build-in with provide users with more flexibility, such as customization, reusability, etc. as suggest by Peyton-Jones (para. 0019, lines 6-10).

Claim 11 has similar limitations as recited in claim 1, except that claim 11 is recited in a method form. Consequently, claim 11 is rejected under the same rationale as stated in claim 1 arguments.

Claim 12 has similar limitations as recited in claim 8, except that claim 12 is recited in a method form. Consequently, claim 12 is rejected under the same rationale as stated in claim 8 arguments.

Claim 13 has similar limitations as recited in claim 10, except that claim 13 is recited in a method form. Consequently, claim 13 is rejected under the same rationale as stated in claim 10 arguments.


Conclusion

The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBBIE M. LE whose telephone number is (571) 272-4111. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Debbie Le
Primary Examiner
3/12/07